

10/673053

Attorney's Docket No.: 14580-031001

Amendments to the Specification:

AMB
11/15/06

Please replace the paragraph beginning at page ⁴ 6, line ²⁴ 20 with the following amended paragraph:

On the TEOS layer 1 ~~[[is]]~~ are elements 3 of a chemically inert and electrically insulating bottom isolation layer (e.g. Al_2O_3 or Ta_2O_5). Over the elements 3 are ferroelectric elements 5 of PZT and further elements 7 of the same chemically inert material which forms layer 3. The PZT elements 5 and elements 3, 7 were formed from respective layers of amorphous PZT and the non-conductive matter (e.g. Al_2O_3) which were formed over the TEOS layer 1 (e.g. by sputtering, at least in the case of the PZT), and then etched (using masking elements, e.g. of TEOS which are not shown). Dry etching is the preferred etching technique here, to guarantee a well shaped structure with a high taper angle.

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Please replace the paragraph beginning at page 6, line ¹⁰ 20 with the following amended paragraph:

Note that TiO_2 is usually an insulator if it is a ell-crystallized material with proper stoichiometry. Therefore the thickness of the layer TiO_2 should be selected appropriately, taking into account that part of the Ti may be sucked into the PZT and incorporated into the lattice during the PZT crystallization process. Note that in Fig. ~~[[3]]~~ 1 there is a layer of TiO_2 covering the upper surface of the TEOS 1 between the elements 3, and some of these areas may include the top surfaces of the plugs extending through the TEOS 1 (or, more usually, the top surfaces of diffusion barriers over the plugs), so if the TiO_2 layer 9 is not removed before the conductive

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material (such as IrO_2) is inserted between the elements 3 then the layer 9 should be thin enough not to electrically insulate the plug and the corresponding IrO_2 element(s). Alternatively, before the gaps are filled with IrO_2 , an etching step can be performed during which TiO_2 9 is removed from the TEOS layer 1 as well as from the top of the elements 7. A side effect of this might be that during the etching some of the TiO_2 (if any remains) might be removed from the side walls of the PZT elements 5.